

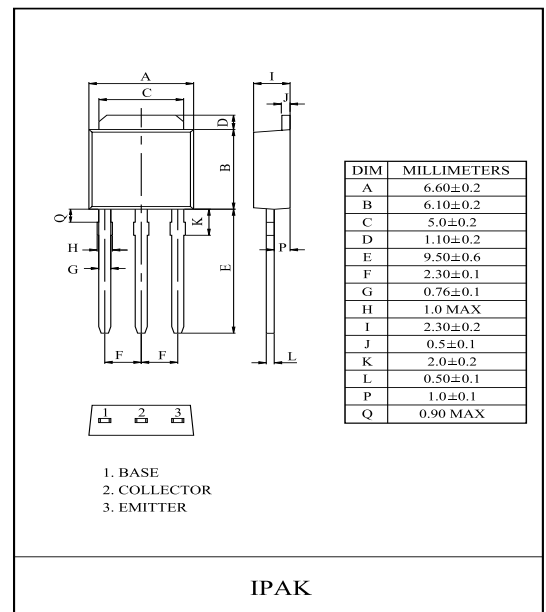
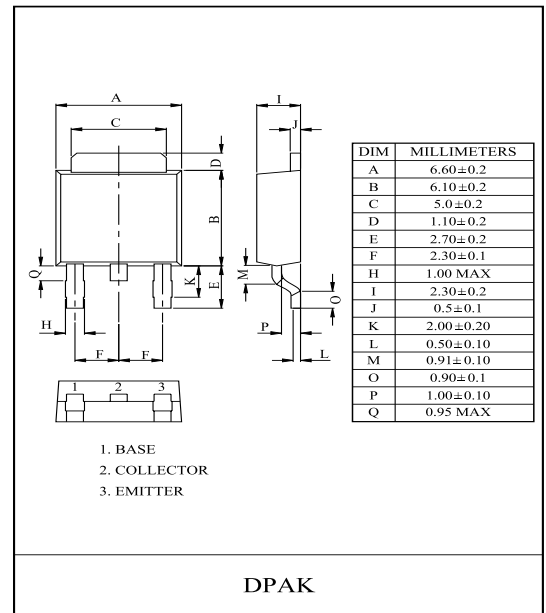
HIGH VOLTAGE SWITCHING.

FEATURES

- Low Collector Saturation Voltage
: $V_{CE(sat)}=0.5V(\text{Max.})$ at $(I_C=0.5A)$.
- High Switching Speed Typically.
: t_f 0.4 μs at $I_C=1A$.
- Complementary to KTA1862D.
- Wide Safe Operating Area (SOA)

MAXIMUM RATING (Ta=25)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	400	V
Collector-Emitter Voltage		V_{CEO}	400	V
Emitter-Base Voltage		V_{EBO}	7	V
Collector Current	DC	I_C	2.0	A
	Pulse		4.0	
Collector Power Dissipation	Ta=25	P_C	1.0	W
	Tc=25		10	
Junction Temperature		T_j	150	
Storage Temperature Range		T_{stg}	-55 150	

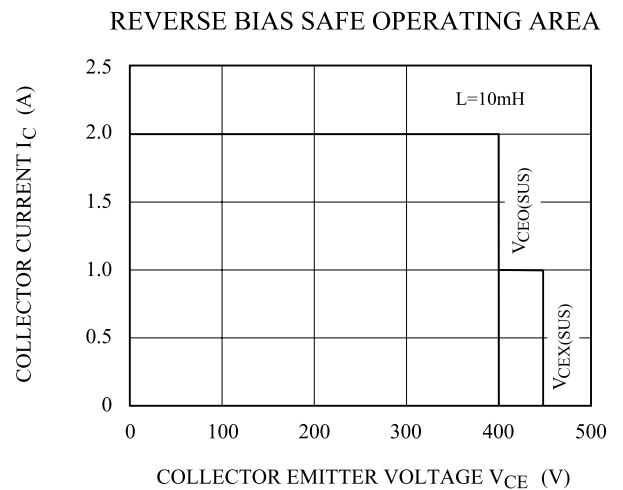
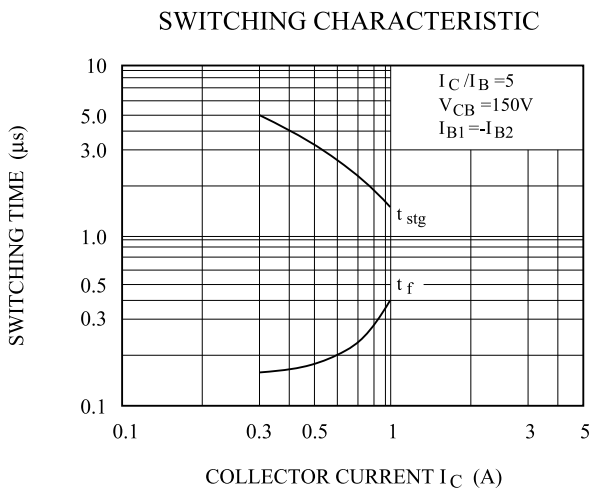
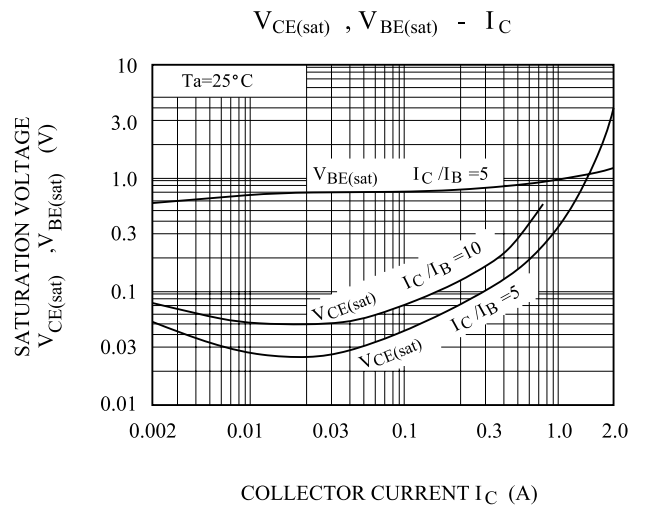
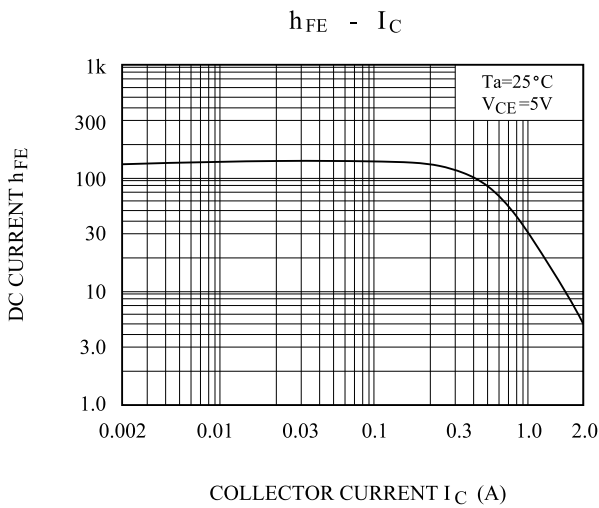
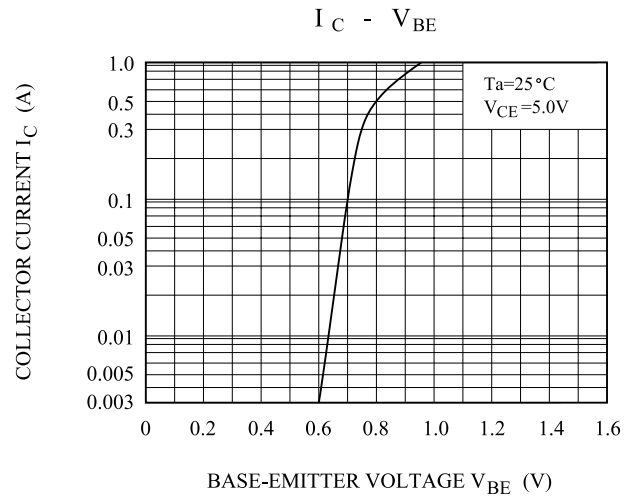
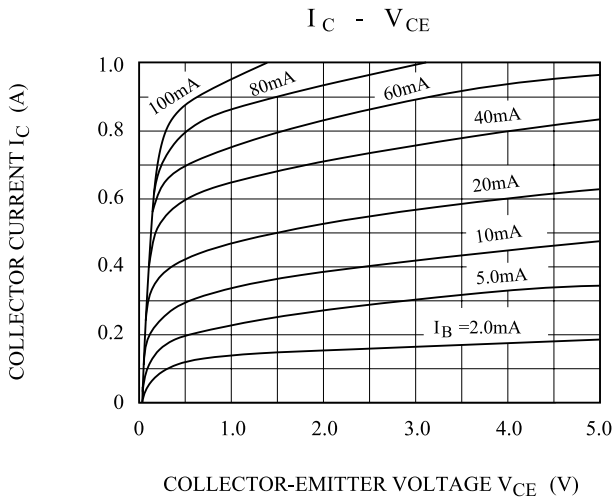


ELECTRICAL CHARACTERISTICS (Ta=25)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	$V_{CB}=400V, I_E=0$	-	-	1.0	μA
Emitter Cut-off Current		I_{EBO}	$V_{EB}=5.0V, I_C=0$	-	-	1.0	μA
DC Current Gain	$h_{FE(1)}$ (Note)	$h_{FE(2)}$	$V_{CE}=5.0V, I_C=100\text{mA}$	56	100	180	
			$V_{CE}=5.0V, I_C=500\text{mA}$	6	-	-	
Collector Saturation Voltage		$V_{CE(sat)}$	$I_C=500\text{mA}, I_B=100\text{mA}$	-	0.3	0.5	V
Base Saturation Voltage		$V_{BE(sat)}$	$I_C=500\text{mA}, I_B=100\text{mA}$	-	-	1.2	V
Transition Frequency		f_T	$V_{CE}=10V, I_E=-100\text{mA}, f=5\text{MHz}$	-	18	-	MHz
Collector Output Capacitance		C_{ob}	$V_{CB}=10V, I_E=0, f=1\text{MHz}$	-	30	-	pF
Switching Time	Turn-on Time	t_{on}		-	0.2	-	μs
	Storage Time	t_{stg}		-	1.8	-	
	Fall Time	t_f		-	0.4	-	

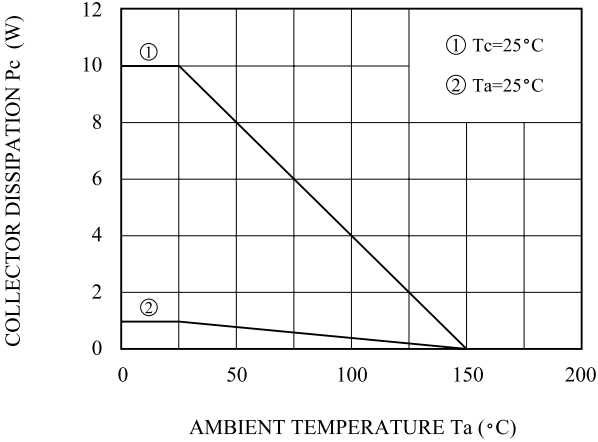
Note : $h_{FE(1)}$ Classification O:56 120 , Y:82 180

KTC3631D/L



KTC3631D/L

Pc - Ta



SAFE OPERATING AREA

